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May 19, 1999

EXPRESS MAIL NO. EJ455653949US

Assistant Commissioner for Patents
Washington, DC 20231
Box Patent Application

TRANSMITTAL LETTER
SMALL ENTITY APPLICATION

Dear Sir:

Please find enclosed a patent application as follows:

Applicant(s): Robert S. Langer, Scott M. Cannizzaro, Bernhard G. Mueller and Kevin Shakesheff

Title: Modification of Surfaces Using Biological Recognition Events

Number of Pages for: Specification: 19; Claims: 9; Sheets Dwgs.: 5; No. Pages Abstract: 1;
Unexecuted Formal Papers: Combined Declaration and Power of Attorney, Small Entity Statement,
and Assignment;

| | | |
|---|--------|-------------------|
| Basic Fee: | | \$380.00 |
| Additional Fees: | | |
| Total Number of Claims in excess of 20 times \$9: | 12-20= | .00 |
| Number of independent claims minus 3 times \$39: | 7-3=4 | 156.00 |
| Multiple Dependent Claims (\$130): | | <u>130.00</u> |
| Total Filing Fee | | \$1,125.00 |

Enclosed please find a check in the amount of \$1,125.00 to cover the appropriate filing fees. Additionally, please charge any further fees, or credit any overpayments, to our Deposit Account No. 03-1721.

If this application is found otherwise to be INCOMPLETE, or if at any time it appears that a TELEPHONE CONFERENCE with counsel would helpfully advance prosecution, please telephone the undersigned at any time.

| NAME | ADDRESS | CITY | STATE | ZIP |
|------------------|------------------|-----------------|-------|-------|
| Mr. J. H. Smith | 123 Main St. | Springfield | Ill. | 62761 |
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| Mr. W. M. Brown | 101 Maple Dr. | Rockford | Ill. | 61101 |
| Mr. C. D. Green | 202 Pine St. | Decatur | Ill. | 62521 |
| Mr. F. G. Black | 303 Cedar Ave. | Normal | Ill. | 62551 |
| Mr. H. I. Yellow | 404 Birch St. | Urbana | Ill. | 62501 |
| Mr. J. K. Purple | 505 Walnut Dr. | Macomb | Ill. | 61455 |
| Mr. L. M. Blue | 606 Spruce St. | Streator | Ill. | 61364 |
| Mr. N. O. Grey | 707 Ash Ave. | Lacon | Ill. | 61543 |
| Mr. P. Q. Red | 808 Hickory St. | Shelburne | Ill. | 61155 |
| Mr. R. S. Orange | 909 Willow Dr. | Waukegan | Ill. | 60087 |
| Mr. T. U. Pink | 1010 Cherry St. | Winnetka | Ill. | 60093 |
| Mr. V. W. Brown | 1111 Elm Ave. | Wilmette | Ill. | 60091 |
| Mr. X. Y. Green | 1212 Maple St. | Winthrop Harbor | Ill. | 60090 |
| Mr. Z. A. Black | 1313 Oak Dr. | Winthrop Harbor | Ill. | 60090 |
| Mr. B. C. Yellow | 1414 Pine St. | Winthrop Harbor | Ill. | 60090 |
| Mr. D. E. Blue | 1515 Cedar Ave. | Winthrop Harbor | Ill. | 60090 |
| Mr. F. G. Grey | 1616 Birch St. | Winthrop Harbor | Ill. | 60090 |
| Mr. H. I. Red | 1717 Walnut Dr. | Winthrop Harbor | Ill. | 60090 |
| Mr. J. K. Purple | 1818 Spruce St. | Winthrop Harbor | Ill. | 60090 |
| Mr. L. M. Blue | 1919 Ash Ave. | Winthrop Harbor | Ill. | 60090 |
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| Mr. V. W. Brown | 2424 Maple St. | Winthrop Harbor | Ill. | 60090 |
| Mr. X. Y. Green | 2525 Oak Dr. | Winthrop Harbor | Ill. | 60090 |
| Mr. Z. A. Black | 2626 Pine St. | Winthrop Harbor | Ill. | 60090 |
| Mr. B. C. Yellow | 2727 Cedar Ave. | Winthrop Harbor | Ill. | 60090 |
| Mr. D. E. Blue | 2828 Birch St. | Winthrop Harbor | Ill. | 60090 |
| Mr. F. G. Grey | 2929 Walnut Dr. | Winthrop Harbor | Ill. | 60090 |
| Mr. H. I. Red | 3030 Spruce St. | Winthrop Harbor | Ill. | 60090 |
| Mr. J. K. Purple | 3131 Ash Ave. | Winthrop Harbor | Ill. | 60090 |
| Mr. L. M. Blue | 3232 Hickory St. | Winthrop Harbor | Ill. | 60090 |
| Mr. N. O. Grey | 3333 Willow Dr. | Winthrop Harbor | Ill. | 60090 |
| Mr. P. Q. Red | 3434 Cherry St. | Winthrop Harbor | Ill. | 60090 |
| Mr. R. S. Orange | 3535 Elm Ave. | Winthrop Harbor | Ill. | 60090 |
| Mr. T. U. Pink | 3636 Maple St. | Winthrop Harbor | Ill. | 60090 |
| Mr. V. W. Brown | 3737 Oak Dr. | Winthrop Harbor | Ill. | 60090 |
| Mr. X. Y. Green | 3838 Pine St. | Winthrop Harbor | Ill. | 60090 |
| Mr. Z. A. Black | 3939 Cedar Ave. | Winthrop Harbor | Ill. | 60090 |
| Mr. B. C. Yellow | 4040 Birch St. | Winthrop Harbor | Ill. | 60090 |
| Mr. D. E. Blue | 4141 Walnut Dr. | Winthrop Harbor | Ill. | 60090 |
| Mr. F. G. Grey | 4242 Spruce St. | Winthrop Harbor | Ill. | 60090 |
| Mr. H. I. Red | 4343 Ash Ave. | Winthrop Harbor | Ill. | 60090 |
| Mr. J. K. Purple | 4444 Hickory St. | Winthrop Harbor | Ill. | 60090 |
| Mr. L. M. Blue | 4545 Willow Dr. | Winthrop Harbor | Ill. | 60090 |
| Mr. N. O. Grey | 4646 Cherry St. | Winthrop Harbor | Ill. | 60090 |
| Mr. P. Q. Red | 4747 Elm Ave. | Winthrop Harbor | Ill. | 60090 |
| Mr. R. S. Orange | 4848 Maple St. | Winthrop Harbor | Ill. | 60090 |
| Mr. T. U. Pink | 4949 Oak Dr. | Winthrop Harbor | Ill. | 60090 |
| Mr. V. W. Brown | 5050 Pine St. | Winthrop Harbor | Ill. | 60090 |

ATTORNEY DOCKET NO.: 0492611-0335 (MIT 8070)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Langer et al.
Serial No.:
Filed: May 19, 1999
For: MODIFICATION OF SURFACES USING BIOLOGICAL RECOGNITION
EVENTS

VERIFIED STATEMENT (DECLARATION)
CLAIMING SMALL ENTITY STATUS
37 CFR 1.9(f) and 1.27(d)
NON-PROFIT ORGANIZATION

I hereby declare that I am an official empowered to act on behalf of the non-profit organization identified below:

NAME OF ORGANIZATION: Massachusetts Institute of Technology
ADDRESS OF ORGANIZATION: 77 Massachusetts Avenue, Cambridge, MA 02138

TYPE OF ORGANIZATION:

- ☒ (X) University or other organization of higher education
- ☐ () Non-profit scientific or educational organization under a statute of a state of the United States of America
NAME OF STATE: _____
CITATION OF STATUTE: _____
- ☐ () Would qualify as tax exempt under the Internal Revenue Service Code (26 USC 501(a) and 501(c) (3) if the organization were located in the United States of America
- ☐ () Tax exempt under the Internal Revenue Service Code (26 USC 501(a) and 501(c) (3).
- ☐ () Would qualify as a non-profit scientific or educational organization under a statute of a state of the United States of America
NAME OF STATE: _____
CITATION OF STATUTE: _____

I hereby declare that the above-identified non-profit organization qualifies as a non-profit organization as defined in 37 CFR 1.9(e), for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code.

I hereby declare that rights under contract or law have been conveyed to and remain with the above-identified non-profit organization with regard to the invention titled:

TITLE: MODIFICATION OF SURFACES USING BIOLOGICAL RECOGNITION EVENTS

by:

INVENTORS: Robert S. Langer, Scott M. Cannizzaro, Bernhard G. Mueller and Kevin Shakesheff

described in:

- ☐ the specification filed herewith
☒ U.S. Patent Application Serial Number _____ filed May 19, 1999
☐ U.S. Patent Number _____
issued _____

If the rights of the above-identified non-profit organization are not exclusive, each individual, concern, or organization having rights to the invention is listed below* and no rights to the invention are held by any person, other than the inventor(s), who could not qualify as a small business concern under 37 CFR 1.9(d) or a non-profit organization under 37 CFR 1.9(e).

*NOTE: Separate verified statements are required from each named person, concern, or organization having rights to the invention, averring to their status as small entities. (37 CFR 1.27).

FULL NAME: _____
ADDRESS: _____
☐ INDIVIDUAL ☐ SMALL BUSINESS CONCERN ☐ NON-PROFIT ORGANIZATION

FULL NAME: _____
ADDRESS: _____
☐ INDIVIDUAL ☐ SMALL BUSINESS CONCERN ☐ NON-PROFIT ORGANIZATION

FULL NAME: _____
ADDRESS: _____
☐ INDIVIDUAL ☐ SMALL BUSINESS CONCERN ☐ NON-PROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these

606050 : 0454T60

| Year | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | 2073 | 2074 | 2075 | 2076 | 2077 | 2078 | 2079 | 2080 | 2081 | 2082 | 2083 | 2084 | 2085 | 2086 | 2087 | 2088 | 2089 | 2090 | 2091 | 2092 | 2093 | 2094 | 2095 | 2096 | 2097 | 2098 | 2099 | 2100 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | 2073 | 2074 | 2075 | 2076 | 2077 | 2078 | 2079 | 2080 | 2081 | 2082 | 2083 | 2084 | 2085 | 2086 | 2087 | 2088 | 2089 | 2090 | 2091 | 2092 | 2093 | 2094 | 2095 | 2096 | 2097 | 2098 | 2099 | 2100 | |

Jarmila Z. Hrbek

Patent Administrator and Office Manager

Massachusetts Institute of Technology

Technology Licensing Office

5 Cambridge Center, Kendall Square

Room NE25-230

Cambridge, MA 02142

DATE:

Exchange.3009685.1

JOINT

**APPLICATION
FOR
UNITED STATES LETTER PATENT**

TO THE COMMISSIONER OF PATENTS AND TRADEMARKS:

BE IT KNOWN, that We, Robert S. Langer, Scott M. Cannizzaro, Bernhard G. Mueller and Kevin Shakesheff invented certain new and useful improvements in Modifications of Surfaces Using Biological Recognition Events of which the following is a specification:

\\Exchange.3009706.1

Express Mail No. EE776166698US